

11. (Amended) A printing machine comprising:

at least one printing unit, the printing unit including a printing surface; and a device for spotwise imaging the printing surface, the device having a laser light source producing at least one laser beam movable relative to a printing surface, the laser beam defining an image spot on the printing surface, the laser beam having a laser power, the device also including a laser control varying the laser power or an exposure time as a function of a distance of the laser light source from the image spot and a distance meter for determining the distance of the laser light source from the image spot.

REMARKS

The specification was objected to. Claims 1, 3 to 7, 10 and 11 were rejected under 35 U.S.C. § 102(b). Claims 2, 8 and 9 were indicated as allowable.

The specification and claims 2 to 6, 10 and 11 have been amended.

Reconsideration of the application is respectfully requested.

Specification

The specification has been amended to correct the typographical error noted by the Examiner. Applicants thank the Examiner for noting this error. Withdrawal of the objection is requested.

35 U.S.C. § 102(b)

Claims 1, 3 to 7, 10 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sarraf.

Claim 1 has been canceled, and claims 3 to 6 made dependent on claim 2, which was indicated as allowable.

Independent claims 10 and 11 have been amended to incorporate the same limitation as

found in claim 2.

Claim 6 has been amended to recite "measuring the distance of the laser light source from the printing surface." It is respectfully submitted that this distance measuring limitation in method claim 6 places claim 6 in condition for allowance. (See Statement for Reasons for Allowance in the outstanding Office Action). Claim 7 depends from claim 6.

It is respectfully requested that the rejections to pending claims 3 to 7, 10 and 11 be withdrawn.


Conclusion

It is respectfully submitted that the present application is in condition for allowance, and applicants respectfully request such action.

Respectfully submitted,

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ADDENDUM SHOWING CHANGES

IN THE SPECIFICATION

[0029] Fig. 4 shows a preferred embodiment of the present invention for the imaging of a printing surface which is located on a rotatable cylinder. An embodiment of this kind can be implemented, in particular, in a printing mechanism or a printing machine. Laser light source 40 generates a laser beam 42 which is imaged, via an imaging optics 44, in spot 410 on printing surface 48 which is located on cylinder 46. Cylinder 46 is rotatable about its axis of symmetry. This rotation is denoted by double arrow B. Laser light source 40 can be moved parallel to the axis of symmetry of cylinder 46 on a linear path, which is indicated by double arrow A. For imaging, cylinder 46 rotates with printing surface 48 according to rotary motion B, and laser light source 40 moves along the cylinder according to translation direction A. An imaging results which runs around the axis of symmetry of cylinder 46 on a helical path. The path of image spot [412] 410 is indicated by line 412. Distance meter 414 emits a light beam 416 which reaches printing surface 48 in image spot 418. In this manner, it is possible to acquire the required information on the distance of laser light source 40 with image spot 410, which is used for imaging, from printing surface 48. Via a connection for exchanging data and/or control signals 420, distance meter 414 is linked to a device for computing the required laser power 422. Via connection 424, the device for computing the required laser power or exposure time 422 is linked to laser control 426 which is able to determine, in particular, the laser power. Data and/or control signals are transmitted between laser control 426 and laser light source 40 via connection 428.

IN THE CLAIMS

2. (Amended) A device for spotwise imaging printing surfaces comprising:
a laser light source producing at least one laser beam movable relative to a printing surface, the laser beam defining an image spot on the printing surface, the laser beam having a laser power; and
a laser control varying the laser power or an exposure time as a function of a distance of the laser light source from the image spot; and
 [The device as recited in claim 1 further comprising] a distance meter for determining the distance of the laser light source from the image spot.
3. (Amended) The device as recited in claim [1] 2 wherein the laser light source includes a diode laser.
4. (Amended) The device as recited in claim [1] 2 wherein the laser light source produces a

plurality of light beams spatially separated from one another for simultaneous imaging of a plurality of printing spots.

5. (Amended) The device as recited in claim [1] 2 wherein the laser light source includes an individually controllable diode laser array.

6. (Amended) A method for imaging printing surfaces using laser light comprising the steps of:
 providing a laser light source for generating a laser beam having a position-dependent intensity distribution in two spatial directions perpendicular to a propagation axis, and a specific divergence;
 providing a printing surface at a distance from the laser light source;
measuring the distance of the laser light source from the printing surface;
 exposing the printing surface located at a certain distance from the laser light source; and
 varying a laser power or exposure time so as to vary a spot size of image spots on the printing surface.

10. (Amended) A printing unit comprising:

a printing surface; and
 a [laser light source] device for spotwise imaging the printing surface, the device having a laser light source producing at least one laser beam movable relative to a printing surface, the laser beam defining an image spot on the printing surface, the laser beam having a laser power, the device also including a laser control varying the laser power or an exposure time as a function of a distance of the laser light source from the image spot and a distance meter for determining the distance of the laser light source from the image spot.

11. (Amended) A printing machine comprising:

at least one printing unit, the printing unit including a printing surface; and a [laser light source] device for spotwise imaging the printing surface, the device having a laser light source producing at least one laser beam movable relative to a printing surface, the laser beam defining an image spot on the printing surface, the laser beam having a laser power, the device also including a laser control varying the laser power or an exposure time as a function of a distance of the laser light source from the image spot and a distance meter for determining the distance of the laser light source from the image spot.